

## VPDES PERMIT FACT SHEET

This document gives pertinent information concerning the reissuance of the VPDES permit listed below. This permit is being processed as a Minor, Municipal permit. The effluent limitations contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260 et seq. The discharge results from the operation of a wastewater treatment facility that serves a Middle and High School Complex. This permit action consists of updating effluent limitations, monitoring requirements and special conditions.  
SIC Code: 4952, 8211

1. Facility Name and Address: Northumberland County Middle School/High School  
Wastewater Treatment Plant  
  
201 Academic Lane  
Heathsville, VA 22473
2. Permit No. VA0092061  
Existing Permit Expiration Date: April 9, 2012
3. Owner: Northumberland County  
Contact: Kenneth D. Eades  
Title: County Administrator  
Telephone No: (804) 580-7666  
Address: P.O. Box 129  
Heathsville, VA 22473
4. Application Complete Date: December 15, 2011  
Permit Drafted By: Janine Howard Date: 9/15/2011, 11/14/2011  
Piedmont Regional Office  
Reviewed By: Jeremy Kazio Date: 12/11/2011  
Curt Linderman Date: 1/27/2012  
  
Public Comment Period: Dates: February 22, 2012 - March 23, 2012
5. Receiving Stream Name: Crabbe Mill Stream, UT  
River Mile: 7-XDW000.24  
Basin: Chesapeake Bay, Atlantic Ocean and Small Coastal Basins  
Subbasin: Small Coastal and Chesapeake Bay  
Section: 2d  
Class: III  
Special Standards: None  
  
7-Day, 10-Year Low Flow (7Q10): 0.0 MGD  
1-Day, 10-Year Low Flow (1Q10): 0.0 MGD  
30-Day, 5-Year Low Flow (30Q5): 0.00 MGD  
30-Day, 10-Year Low Flow (30Q10): 0.00 MGD  
  
Harmonic Mean Flow (HM): undetermined  
Tidal? NO  
On 303(d) list? NO

See **Attachment A**- Flow Frequency Memorandum

6. Operator License Requirements:  
 The recommended attendance hours by a licensed operator and the minimum daily hours that the treatment works should be manned by operating staff are contained in the Sewage Collection and Treatment Regulations (SCATS) 9 VAC 25-790-300.D. A **Class IV** licensed operator is required for this facility.
7. Reliability Class: Reliability is a measurement of the ability of a component or system to perform its designated function without failure or interruption of service. The reliability classification is based on the water quality and public health consequences of a component or system failure. The permittee is required to maintain **Class II** Reliability for the existing facility.
8. Permit Characterization:  
☐ Private      ☐ Federal      ☐ State      ☒ POTW      ☐ PVOTW  
☐ Possible Interstate Effect      ☐ Interim Limits in Other Document
9. Discharge Description:

OUTFALL NUMBER	DISCHARGE SOURCE	TREATMENT	DESIGN FLOW
001	Domestic wastewater discharge generated by a school complex	Screening, flow equalization, pretreatment sludge holding tank, anoxic tank, Sequencing Batch Reactor (SBR), chlorination (tablet), post aeration, and dechlorination (tablet).	0.016 MGD

The plant was brought on-line with the opening of the Northumberland Middle/High School in September of 2009. The plant serves a student and staff population of approximately 1000 persons. To maintain the operational efficiency of the plant, seed sludge from the Callao WWTP is added approximately once per year.

See **Attachment B**- Plant Flow Diagram

10. Sewage Sludge Use or Disposal:  
 Sewage sludge from this facility is stored in the 6,000 gallon sludge holding tank where it is anaerobically digested. Approximately once per year the sludge is pumped from the holding tank and transported by One-Whay Sanitation LLC (Weems, VA) to Reedville Sanitary District (VA0060712) for drying. Reedville Sanitary District ultimately dispose of the sludge at Middle Peninsula Landfill and Recycling Facility. An estimated six (6) dry metric tons of sludge are generated at the Northumberland Middle/High School facility in a 365-day period.

Sludge Haul route from the facility (201 Academic Lane, Heathsville) to Reedville Sanitary District (154 Menhaden Drive, Reedville):  
 Right on Route 360 (Northumberland Highway) for approximately 11 miles;  
 Merge onto Fleeton Road (SR 657) for 1.6 miles;  
 Right onto Menhaden Road (SR 659) for 0.2 miles.

See **Attachment C**- Sludge Haul Route and Map

Sludge is hauled between 8-4pm Monday through Friday.

11. Discharge Location Description: This facility discharges to an unnamed tributary of Crabbe Mill Stream.  
Name of USGS topographic map: Heathsville Quadrangle (145B)

See **Attachment D-** Topographic Map

12. Material Storage: Chlorination tablets and sodium bisulfate tablets used for dechlorination are stored in their original containers with no exposure to storm water.

13. Ambient Water Quality Information

The Northumberland Middle/High School Wastewater Treatment Plant discharges to an unnamed tributary of Crabbe Mill Stream. The outfall is located at river mile 7-XDW000.24. The USGS Heathsville Quadrangle shows the receiving stream to be an intermittent stream and the receiving stream is dry at the theoretical flows used to develop permit limitations. For this reason effluent is assumed to comprise 100% of the stream flow during low flow conditions and effluent data are used in place of ambient stream data to evaluate pollutant wasteload allocations and the need for effluent limitations.

The receiving stream was not assessed for any Designated Uses during the 2010 305(b)/303(d) Water Quality Assessment (Category 3A).

14. Antidegradation Review & Comments: Tier 1   X   Tier 2        Tier 3

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The antidegradation review begins with a Tier determination. The unnamed tributary to Crabbe Mille Stream is considered a Tier 1 water. This determination is due to the intermittent nature of the stream, where beneficial uses cannot be fully attained.

15. Site Inspection: Date: October 3, 2011 Performed by: Janine Howard

See **Attachment E-** Site Inspection Report

16. Effluent Screening & Limitation Development:

Numeric permit limitation evaluations utilize conservative low flow ambient conditions to represent circumstances in which the effluent has the greatest potential to impact the receiving stream. At the discharge point, the receiving stream is intermittent and is dry during theoretical low flows therefore, a complete mix (100%) assumption was appropriate for this facility and receiving stream. Additionally, because of the receiving stream's intermittent nature, effluent data is used to characterize the receiving stream.

Absent of effluent hardness data, a conservative value of 25 mg/L CaCO<sub>3</sub> was assumed and used to characterize the effluent/stream. The 90<sup>th</sup> and 10<sup>th</sup> percentile maximum effluent pH values were calculated using DMR data. The 90<sup>th</sup> percentile annual effluent temperature was calculated using data from temperature benchmark sheets that were submitted as part of the application. MSTRANTI was used to determine maximum wasteload allocations (WLA) for each water quality

parameter that will maintain Water Quality Standards (WQS) in the receiving stream and protect against acute and chronic toxicity. Reasonable potential evaluations of parameters reported in quantifiable concentrations on the application and of parameters that are known to be present in a municipal effluent are completed using Stats.exe to determine the need for a water-quality based permit limitation.

See **Attachment F** for facility DMR data, pH data, and application data

See **Attachment G** for the MSTRANTI data source report, MSTRANTI, and Stats.exe results.

**Table 1.** Basis for Effluent Limitations

PARAMETER	BASIS FOR LIMIT	DISCHARGE LIMITS					
		MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	MAXIMUM
(002) pH	1, 2	NA		NA		6.0 S.U.	9.0 S.U.
(004) Total Suspended Solids (TSS)	3, 4	10 mg/L	600 g/d	15 mg/L	910 g/d	NA	NA
(005) Total Residual Chlorine (TRC)	1	0.0080 mg/L		0.0098 mg/L		NA	NA
(007) Dissolved Oxygen (DO)	1,4	NA		NA		5.0 mg/L	NA
(039) Ammonia-N (Interim)	3	2.42 mg/L		2.42 mg/L		NA	NA
(039) Ammonia-N (Final)	1	0.48 mg/l		0.48 mg/l		NA	NA
(068) TKN	3, 4	3.0 mg/L	180 g/d	4.5 mg/L	270 g/d	NA	NA
(159) cBOD <sub>5</sub>	3, 4	10 mg/L	600 g/d	15 mg/L	910 g/d	NA	NA
(157) TRC Contact tank*	3	NA		NA		1.0 mg/l	NA
(213) TRC Contact tank*	3	NA		NA		0.60 mg/l	NA

1. State Water Quality Standards (9VAC25-260-50, effective 1/6/2011)
2. Federal Effluent Guidelines (40 CFR Part 133- Secondary Treatment Regulations)
3. Best Engineering Judgment (BEJ)
4. Stream Sanitation Memo (12/19/2006)

NA = Not Applicable

\* The compliance point for these limitations is at the outlet of the chlorine contact tank, prior to dechlorination. These samples are not final effluent (see Part I.B. Additional Chlorine Limitations and Monitoring Requirements).

a. Water Quality Based Limitations

TRC: Chlorine is a toxic pollutant purposefully introduced into the wastewater. Consequently, a reasonable potential analysis is not necessary to establish the need for a limitation. Per GM00-2011, a chlorine limitation was forced using a datum of 20,000 µg/L. The resulting limitation calculated using Stats.exe is more stringent than the TRC limit in the 2007 permit. The more stringent limit is a result of the permit limitation calculation being based on thirty (30) samples in a month (1/day monitoring frequency), as written in the 2007 permit. The 2007 limitation was calculated based on a single sample being available in a one month period resulting in a different

limitation. A review of DMR data (Attachment F) shows that the final effluent TRC was reported as less than the quantification level (QL) of 0.10 mg/L 100% of the time. For this reason the permittee is already complying with the reduced 2012 permit limitation and a compliance schedule is not necessary.

Ammonia-N (Final): An expected ammonia-N value of 3.0 mg/L was used to calculate an ammonia limitation (see Stats evaluation for discussion, Attachment G). The 0.48 mg/L limit is more stringent than the 2.42 mg/L existing limit. The decrease in the numeric permit limitation is due to a calculated 90<sup>th</sup> percentile pH value of 8.9 SU using permit DMR data (see Attachment F) as opposed to 8.0 SU during the 2007 permit issuance, in addition to the high (28°C) 90<sup>th</sup> percentile annual effluent temperature. A review of the DMR data shows that the facility is presently complying with the 2012 limit only about 50% of the time. To allow the permittee time to come into complete compliance with the limitation, a four year schedule of compliance is provided for the more stringent limit. In the interim, the 2007 permit limitation of 2.42 mg/L remains in effect. See Item 19 for information on the schedule of compliance.

b. Best Engineering Judgment (BEJ)

Ammonia-N (Interim): A review of DMR data (see Attachment F) indicated that approximately 50% of the ammonia data submitted from April 2009- August 2011 are in excess of the more stringent 2012 permit limit of 0.48 mg/L (discussed above). For this reason it is DEQ's BEJ to allow a four year Schedule of Compliance for this facility to comply with the more stringent permit limitation. In the interim the 2007 ammonia permit limitation of 2.42 mg/L remains in effect.

TRC Contact Tank (157/213): Per the VPDES Permit Manual (1/27/2010 edition, Section MN-3, page 1), these limitations are placed on the outflow of the chlorine contact tank, prior to dechlorination.

Dissolved Oxygen: The Dissolved Oxygen (DO) criteria in 9 VAC 25- 260-50 include a minimum of 4.0 mg/L and a daily average of 5.0 mg/L for Class III water bodies within the Coastal and Piedmont zones. The minimum dissolved oxygen limitation of 5.0 mg/L is carried forward from the 2007 permit and is a Best Engineering Judgement based on the recommendation of the stream sanitation memorandum (Attachment H).

TSS, TKN and cBOD<sub>5</sub>: The TSS, TKN and cBOD<sub>5</sub> permit limitations are carried forward from the 2007 permit and are based on the recommendations made in Stream Sanitation Analysis (see Attachment H).

Human Health Evaluation

Separate human health (HH) standards apply to waters that are designated as "Public Water Supplies (PWS)" and "all other surface waters." The receiving stream is not designated as a PWS; consequently, the HH (PWS) standards are not applicable to this discharge. Human Health Water Quality Criteria are not established for the parameters limited in this permit or for the pollutants reported in the application and no further evaluation with regard to human health is necessary.

c. Nutrients

Refer to Section 25 comment i. and Section 26 for a discussion on the Chesapeake Bay discharger nutrient requirements. Due to the facility's design flow of less than 40,000 gallons per day the facility is not required to register for the Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia and nutrient limitations in the individual permit are not necessary.

17. Basis for Sludge Use & Disposal Requirements:

Not applicable, as this facility does not land apply sludge (see Item 10 for more information on sewage sludge use and disposal).

18. Antibacksliding Statement:

All limitations in the proposed 2012 permit reissuance are the same or more stringent than the limitations in the 2007 permit issuance.

19. Compliance Schedules:

A four year compliance schedule is given for the reduced ammonia-N limit (Part I.D). Per 9VAC25-31-250, schedules of compliance may be established in permits for existing sources that contain more restrictive water quality based effluent limitations. A four year compliance schedule is granted for ammonia-N based on a review of effluent data from April 2009 to August 2011, which indicated that approximately 50% of the reported effluent concentrations are in excess of the new 0.48 mg/L ammonia-N limit. The permittee may need to make operational changes at the plant in order to meet the final ammonia-N limitation.

20. Special Conditions:

**Part I.B.1 & 2 : Additional Limitations and Monitoring Requirements**

**Rationale:** Required by Sewage Collection and Treatment Regulations, 9VAC25-790 and Virginia Water Quality Standards 9VAC25-260-170, Bacteria; other recreational waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

**Part I.C.1: 95% Capacity Reopener**

**Rationale:** Required by VPDES Permit Regulation, 9VAC25-31-200 B 4 for all POTW and PVOTW permits.

**Part I.C.2: CTC, CTO Requirement**

**Rationale:** Required by Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790.

9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade.

**Part I.C.3: O & M Manual Requirement**

**Rationale:** Required by Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790; VPDES Permit Regulation, 9VAC25-31-190 E.

**Part I.C.4: Materials Handling/Storage**

**Rationale:** 9 VAC 25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia § 62.1-44.16 and 62.1-44.17 authorizes the Board to regulate the discharge of industrial waste or other waste.

**Part I.C.5: Reliability Class**

**Rationale:** Required by Sewage Collection and Treatment Regulations, 9VAC25-790 for all municipal facilities.

**Part I.C.6. Licensed Operator Requirement**

**Rationale:** The VPDES Permit Regulation, 9VAC25-31-200 C and the Code of Virginia § 54.1-2300 et seq, Rules and Regulations for Waterworks and Wastewater Works Operators (18VAC160-20-10 et seq.), require licensure of operators.

**Part I.C.7: Total Maximum Daily Load (TMDL) and Nutrient Reopeners**

**Rationale:** Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The re-opener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other wasteload allocation prepared under section 303 of the Act.

9 VAC 25-40-70 A authorizes DEQ to include technology-based annual concentration limits in the permits of facilities that have installed nutrient control equipment, whether by new construction, expansion or upgrade.

9 VAC 25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

**Part I.C.8: Sludge Reopener**

**Rationale:** Required by VPDES Permit Regulation, 9VAC25-31-220 C for all permits issued to treatment works treating domestic sewage.

**Part I.C.9: Sludge Use and Disposal**

**Rationale:** VPDES Permit Regulation, 9VAC25-31-100 P, 220 B 2 and 420 through 720; and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on sludge use and disposal practices and to meet specified standards for sludge use and disposal.

**Part I.C.10: Compliance Reporting**

**Rationale:** Authorized by VPDES Permit Regulation, 9VAC25-31-190 J 4 and 220 I. This condition is necessary when pollutants are monitored by the permittee and a maximum level of quantification and/or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values.

The QLs for the listed parameters are Agency prescribed. The QL for cBOD<sub>5</sub> has been reduced from 5 mg/L to 2 mg/L to be consistent with recently promulgated General Permits.

**Part I.C.11: Closure Plan**

**Rationale:** Code of Virginia § 62.1-44.19 of the State Water Control Law. This condition establishes the requirement to submit a closure plan for the wastewater treatment facility if the treatment facility is being replaced or is expected to close.

**Part I.C.12 Indirect Dischargers**

**Rationale:** Required by VPDES Permit Regulation, 9 VAC 25-31-200 B.1.& B.2.for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.

**Part I.D Schedule of Compliance for Ammonia- N**

**Rationale:** 9VAC 25-31-250 allows for schedules of compliance, when appropriate, which will lead to compliance with the Clean Water Act, the State Water Control Law and regulations promulgated under them.

**Part II, Conditions Applicable to All Permits**

**Rationale:** VPDES Permit Regulation, 9VAC25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed

21. Changes to 2007 Permit:

Changes to Permit Cover Page:

The cover page boilerplate verbiage has been revised as per the January 27, 2010 VPDES Permit Manual, Section MN-1. The signatory has been updated from the Deputy Regional Director to the PRO Water Permit Manager based on the October 2008 DEQ Agency Policy Statement 2-09, "Delegations of Authority." The facility location has been updated to include street number. The permit owner has been updated to Northumberland County from Northumberland School Board, in accordance with the Change of Ownership Agreement form (Attachment J) submitted with the application. The effective date has been updated and the expiration date truncated from a 5-year expiration date to March 31, 2017, in order for the next permit term to start with a complete calendar month (10/25/11 staff decision).

**Table I. Changes to Part I. A Effluent Limits and Monitoring Requirements:**

Parameter Changed	Effluent Limits Changed		Monitoring Requirement Changed		Reason for Change:
	From	To	From	To	
TRC	16 µg/L	0.0080 mg/L	1/Day	1/Day	Permit limitation calculation based on daily monitoring instead of 1/month as in the 2007 permit.
Ammonia- N (Interim)	---	2.42 mg/L	---	1/Month	BEJ- A four year schedule of compliance is given for the more restrictive limitation. The 2007 final ammonia-N limitation becomes an interim limitation in the 2012 permit.
Ammonia- N (Final)	2.42 mg/L	0.48 mg/L	1/Month	1/Month	Water-quality based limitation
<b>Other Changes</b>	<b>From</b>	<b>To</b>	<b>Change:</b>		
Footnote	NL = No limit, monitoring only	NL = No Limit, monitoring and reporting are required	Updated to include reporting requirement for clarity		



Footnote	a.	a.	Citation to 95% capacity flow special condition added
Footnote	b.	b.	Language update per PRO convention
Footnote	---	d.	Added to reference compliance reporting requirements
Footnote	---	e.	Added to reference Part I.D. Schedule of Compliance
Part I.A.4	---	4.	Added per VPDES permit manual (1/27/10 edition) and PRO staff decision (6/28/11)

**Table II. Changes to Permit Special Conditions (Part I):**

<b>From:</b>	<b>To:</b>	<b>Change</b>
B. Additional Limitations and Monitoring Requirements	B. Additional Limitations and Monitoring Requirements	Language and monitoring frequency update per 1/27/2010 edition VPDES Permit Manual
C.1 Reaching Plant Design Capacity	C.1 95% Capacity Reopener	Language update per 1/27/2010 edition VPDES Permit Manual
C.2 CTC, CTO Requirements	C.2 CTC, CTO Requirement	Language update per 1/27/2010 edition VPDES Permit Manual and GM 07-2008 Amendment 2
C.3 O & M Manual Requirement	C.3 O & M Manual	Language update per 1/27/2010 edition VPDES Permit Manual
C.4 Materials Handling/Storage	C.4 Materials Handling/Storage	Language update per 1/27/2010 edition VPDES Permit Manual
C.5 Reliability Class	C.5 Reliability Class	No change
C.6 Licensed Operator Requirement	C.6 Licensed Operator Requirement	No change
C.7 TMDL Reopener	C.7 TMDL and Nutrient Reopeners	Language update per 1/27/2010 edition VPDES Permit Manual and GM 07-2008 Amendment 2
C.8 Sewage Sludge Reopener	C.8 Sludge Reopener	No change
C.9 Sludge Management Plan	C.9 Sludge Use and Disposal	Language update per 1/27/2010 edition VPDES Permit Manual
C.10 Compliance Reporting	C.10 Compliance Reporting	Language update per 1/27/2010 edition VPDES Permit Manual and cBOD <sub>5</sub> QL updated for consistency with recently issued General Permits
---	C.11 Closure Plan	Added per 1/27/2010 edition VPDES Permit Manual
---	C.12 Indirect Dischargers	Added per 1/27/2010 edition VPDES Permit Manual and 11/28/11 PRO staff decision
---	Part I.D Schedule of Compliance for Ammonia-N	Added due to more stringent final Ammonia-N limitation. DMR data suggests that the permittee is not already meeting this limitation meaning that operation changes may need to be made to comply with the more restrictive limit.

Changes to Part II: Part II.A.4 added to address the Virginia Environmental Laboratory Accreditation Program (VELAP) requirements. The addition was made in accordance with the WPM 7/19/11 email and Central Office guidance. Part II.K.1.c second sentence updated to reflect “public agency” rather than “federal agency.”

23. Regulation of Users: 9VAC25-31-280 B 9: There are no industrial users contributing to the treatment works. The treatment plant services a school complex only.

24. Public Notice Information required by 9VAC25-31-280 B:

Publishing newspaper: *The Northumberland Echo*

Comment period: February 22, 2012 - March 23, 2012

Date of first publication: February 22, 2012

Date of second publication: February 29, 2012

All pertinent information is on file and may be inspected, and copied by contacting Janine Howard at Virginia DEQ-Piedmont Regional Office, 4949-A Cox Road, Glen Allen VA 23060, (804) 527-5046, e-mail [Janine.howard@deq.virginia.gov](mailto:Janine.howard@deq.virginia.gov).

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit. The public may review the draft permit and application at the DEQ office named above by appointment or may request copies of the documents from the contact person listed above.

Public Notice Comments:

No public comments were received during the public comment period. The draft permit has not changed as a result of the public comment period.

25. Additional Comments:

Previous Board Action: None

Planning Statement: This discharge is in conformance with the existing planning documents for the area (PRO, 12/16/2011).

Staff Comments:

- a. Reduced monitoring was not considered during this permit reissuance. Per the VPDES Permit Manual (1/27/2010 edition, Section MN-2), to qualify for reduced monitoring facilities should not have been issued any enforcement related documents during the past three years. This facility was issued Warning Letters dated August 7, 2009 and December 3, 2010, documenting TSS permit limit exceedances. A warning Letter was also issued March 18, 2010 citing cBOD<sub>5</sub>, TKN, TSS, and ammonia permit limitation exceedances. Due to the recent compliance issues, this facility did not qualify for reduced monitoring during this permit reissuance.
- b. Financial Assurance does not apply to this facility because it is a POTW.

- c. The 2011 permit fee was deposited on 11/3/2011.
- d. EPA has waived the right to comment and/or object to the adequacy of the draft permit.
- e. This discharge is not controversial. DEQ staff believes that the attached effluent limitations will maintain the Water Quality Standards adopted by the State Water Control Board.
- f. The facility is not a member of the Virginia Environmental Excellence Program (VEEP).
- g. As of 2/15/12 the permittee is an e-DMR participant.
- h. This facility is not subject to coverage under 9 VAC 25-151 General VPDES Permit VAR05 for Discharges of Storm Water Associated with Industrial Activity (Sector T) due to a design flow of less than 1.0 MGD.
- i. The facility is not presently registered for coverage under 9 VAC 25-820-10 *et seq.* General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia. The facility does discharge into the Chesapeake Bay Watershed, however it is considered a non-significant discharger as defined in 9 VAC 25-820-10. Non-significant discharges with individual permits in existence as of July 1, 2005 are covered by rule under the Watershed General Permit (9 VAC 25-820-10 *et seq.*). New or expanding non-significant dischargers that trigger the offset requirements established under the Code of Virginia are required to register and will be assigned individual allocations based on permitted design capacity or offsets upon issuance of a CTO for the expansion. Although this facility's discharge did not commence prior to July 1, 2005 (the first permit was issued April 10, 2007 and the facility was issued a Certificate to Operate on 2/17/2009), it does not trigger the offset and registration requirements because it discharges less than 40,000 gallons per day. Discharges that are less than 40,000 gallons per day and commenced discharging prior to January 1, 2011 are not required to register for the Watershed General permit (see GM 07-2008 Amendment 2). The facility is listed in the Chesapeake Bay TMDL as a non-significant discharger; see Item 26 for more discussion.
- j. The Certificate to operate (CTO) for this facility was issued on February 17, 2009. See **Attachment I**. The Certificate to Construct (CTC) was issued 6/11/2007.

Other Agency Comments:

VDH were supplied the permit application on 10/19/2011 for review.

VDH responded in a letter dated October 21, 2011 and stated that there are no public water supply intakes within 15 miles downstream of the discharge. VDH raised no objections to the permit reissuance and did not request a copy of the draft permit.

Division of Shellfish Sanitation (DSS):

DSS were supplied a copy of the on 10/20/2011 for review. As of 1/31/2012 no comments were received and DSS did not request a copy of the draft permit.

26. 303(d) Listed Segments (TMDL):

The receiving stream was not assessed for any Designated Uses during the 2010 305(b)/303(d) Water Quality Assessment (Category 3A).

A shellfish bacteria TMDL has been completed for the Great Wicomico River and includes the entire watershed. The facility was not addressed in the TMDL because the portion of the Great Wicomico River to which the facility drains is administratively condemned and the Shellfish Use is considered to be removed.

The Chesapeake Bay TMDL was approved by the EPA on 12/29/2010. The facility's discharge is included in the aggregated total nitrogen, total phosphorus, and total suspended solids wasteload allocations for non-significant wastewater dischargers in the Virginia portion of the mesohaline Chesapeake Bay segment 5 estuary (CB5MH\_VA). Per DEQ's Phase I Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL (11/29/2010) the non-significant TN and TP loads are considered aggregate and are not to be included in individual VPDES permits. The aggregated TN and TP loads are regulated by the Watershed Nutrient General Permit. Per the WIP, provided the aggregated loads for all discharges is less than the aggregate TSS load in the WIP and the individual permits contain technology-based TSS limits as necessary, the individual VPDES permits will be considered to be consistent with the TMDL. TSS is limited in this permit. Per GM 07-2008, Amendment 2 and § 62.1-44.19:15., due to this facility's discharge being less than 40,000 gallons per day and the commencement discharge prior to January 1, 2011, registration for the Watershed General Permit is not required (see Item 25.i., above).

The facility will neither cause nor contribute to violations of the Water Quality Standards (9 VAC 25-260 et seq., effective 1/6/11).

27. Attachments

Attachment A: Flow Frequency Memorandum  
Attachment B: Plant Flow Diagram  
Attachment C- Sludge Haul Route and Map  
Attachment D: Topographic Map- Heathsville Quadrangle (145B) and Aerial Image  
Attachment E: Site Inspection Report  
Attachment F: DMR data, Application Data  
Attachment G: MSTRANTI data source report, MSTRANTI, Stats.exe results  
Attachment H: Stream Sanitation Memorandum (12/9/2006)  
Attachment I: Certificate to Operate (2/17/2009)  
Attachment J: Change of Ownership Agreement Form